

Gulf Oil Exploration and Production Company

C. D. Borland
PRODUCTION MANAGER, HOBBS AREA

July 26, 1978

P. O. Box 670
Hobbs, NM 88240

JUL 27 1978

CONSERVATION DIV
Santa Fe

DHC # 253
Due: 8/16/78
Re: H. T. Mattern (NCT-C) No. 7,
Section 18-21S-37E; H. T. Mattern
(NCT-C) No. 9, Section 7-21S-37E;
H. T. Mattern (NCT-C) No. 11,
Section 8-21S-37E; Lea County,
New Mexico

Request for Approval to Downhole
Commingle the Blinebry and
Drinkard Pools

Mr. Joe D. Ramey
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Dear Sir:

Your administrative approval is requested for an exception to Rule 303-A to permit downhole commingling of production in the subject well from the Blinebry and Drinkard Pools (commingled in surface storage by Administrative Order PC-517, dated 9-8-75). Production from the same two pools is presently being commingled downhole in Gulf's H. T. Mattern (NCT-C) Wells No. 5 and 8 per Order No. R-5274, dated August 31, 1976. There is no evidence of fluid incompatibility, and we do not expect any reservoir damage due to downhole commingling in the wellbore. Ownership of the two pools in each of the subject wells is common and correlative rights will not be violated.

Currently, Wells No. 7, 9 and 11 each utilize a single pumping unit installation producing from the Drinkard pool. Upon approval to downhole commingle, we will isolate the Drinkard and perforate and stimulate the Blinebry zone. The Blinebry will then be tested separately. At that time, Gulf will submit to the District Supervisor of the Energy and Minerals Department of the Oil Conservation Division, separate stabilized well tests from the Blinebry pool for computing an allocation formula as provided under the guidelines of Order No. R-5274.

We propose to tube the wells to the Drinkard zone and utilize equipment on the Drinkard in each of the wells to lift the fluids from the commingled zone. Based upon offsets on the H. T. Mattern (NCT-C) Lease, it is our expectation that produced fluids from the Blinebry zone



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in Wells No. 7, 9 and 11 will need to be artificially lifted. Upon approval of this application and in the event that the Blinbry does not require artificial lift, Gulf will postpone downhole commingling until such a time both zones require artificial lift and the total daily production from both zones, before commingling, does not exceed 40 barrels per day.

Additional information concerning this application as outlined in Rule 303-C is attached for your consideration.

Yours very truly,



C. D. BORLAND

Attachments

LBI/dch

cc: Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

Continental Oil Company
P. O. Box 460
Hobbs, NM 88240

Campbell & Hendrick
P. O. Box 401
Midland, TX 79701

Texaco Inc.
P. O. Box 728
Hobbs, NM 88240

Sohio Petroleum Company
P. O. Box 3000
Midland, TX 79701

Getty Oil Company
P. O. Box 249
Hobbs, NM 88240

Apco Oil Company
P. O. Box 1027
Odessa, TX 79760

Sun Oil Company
P. O. Box 1205
Hobbs, NM 88240

Marathon Oil Company
P. O. Box 2409
Hobbs, NM 88240

Petro-Lewis Corporation
P. O. Box 509
Levelland, TX 79336

Shell Oil Company
P. O. Box 1509
Midland, TX 79701

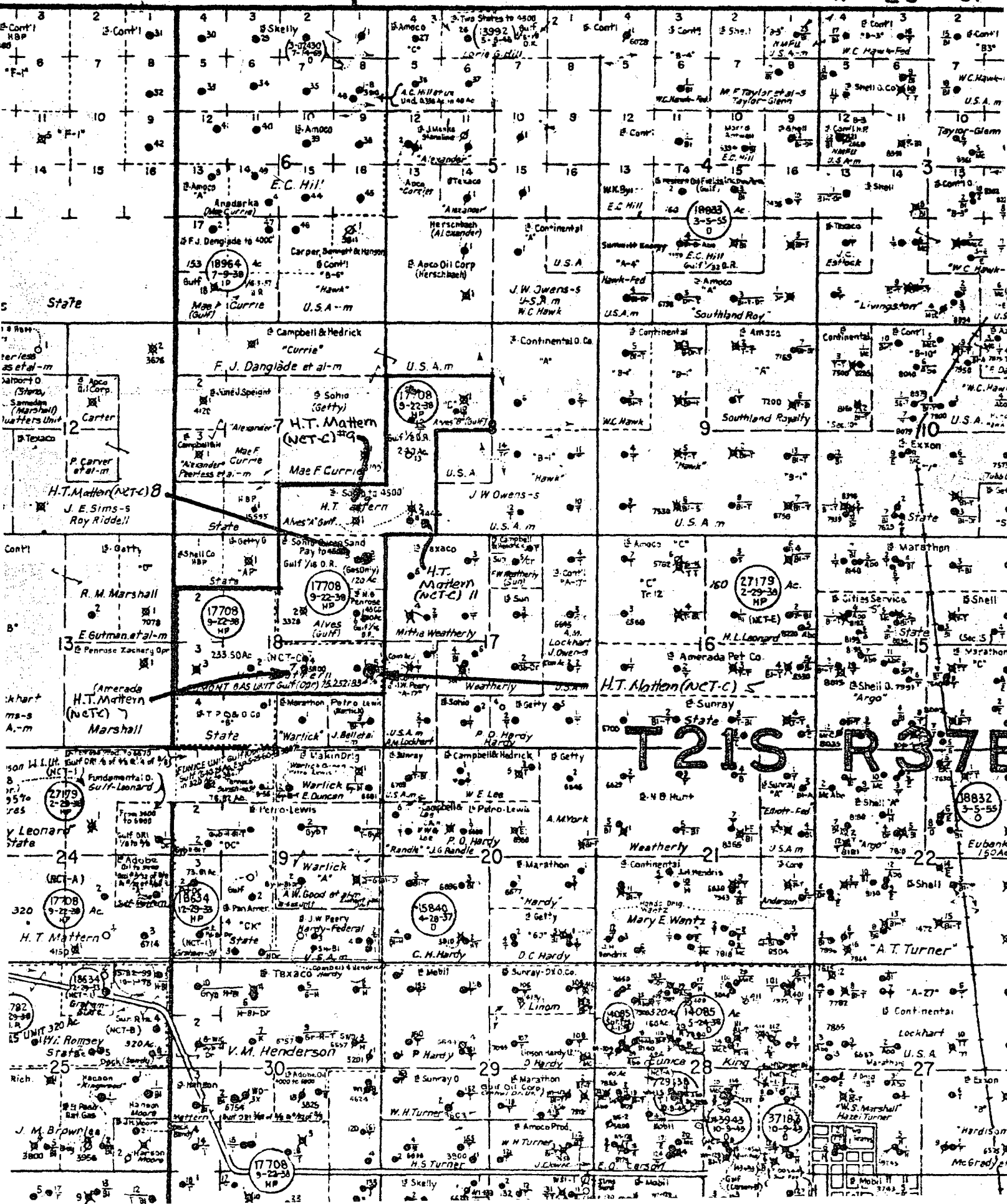
Texas Pacific Oil Company
P. O. Box 4067
Midland, TX 79701

Amerada Hess Corporation
P. O. Box 840
Seminole, TX 79360

— below SA

- Gulf wells downhole commingled

T. 20 S.



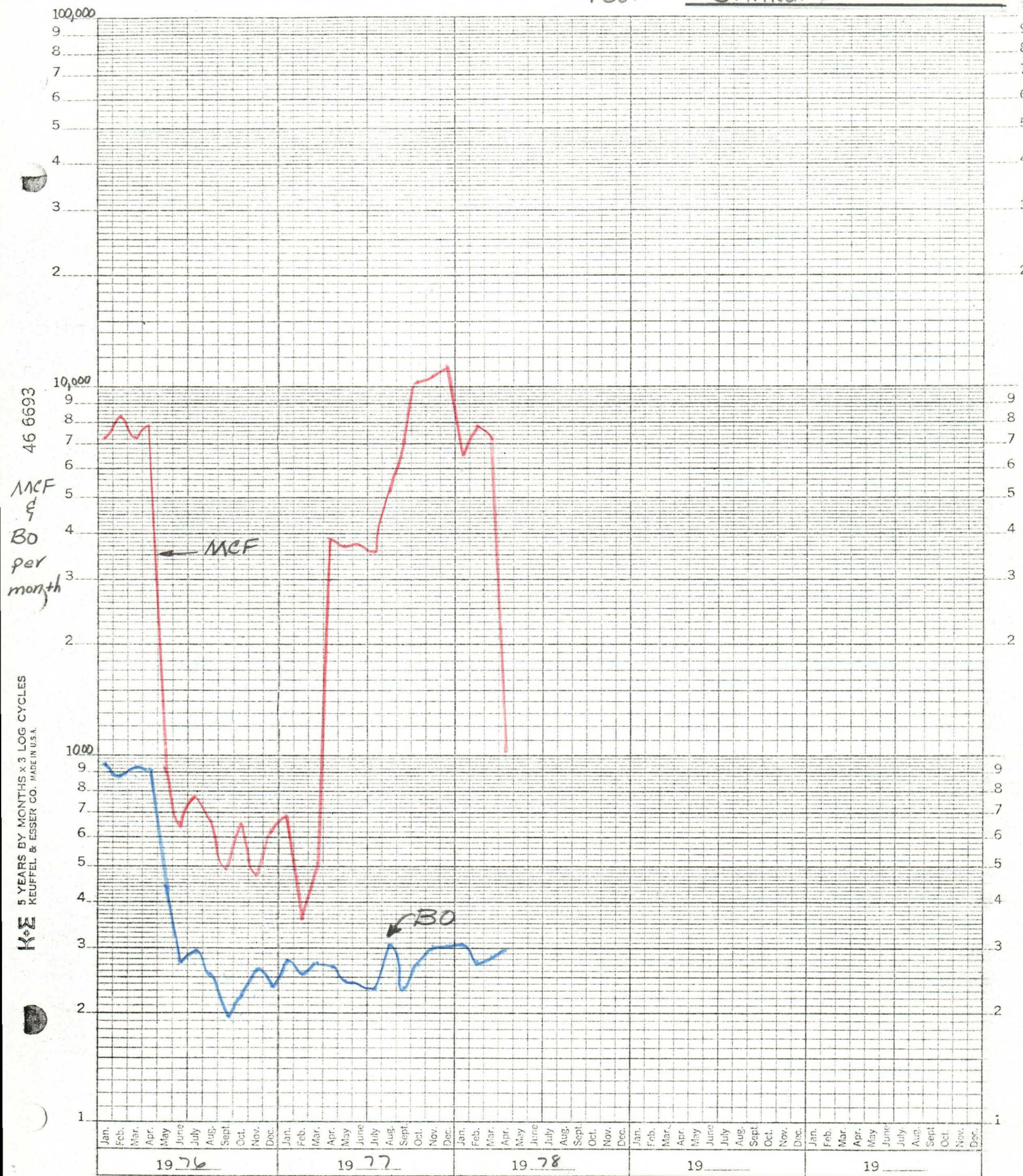
H. T. MATTERN (NCT-C) NO. 7

- (1) Gulf Oil Corporation
P. O. Box 670
Hobbs, NM 88240
 - (2) Lease and Well No.: H. T. Mattern (NCT-C) No. 7
Unit J, 2130'FSL & 1980'FEL
Section 18-21S-37E, Lea County, New Mexico
 - (3) Well History: Well No. 7 was drilled to a total depth of 6785' with 5-1/2" OD production casing set at 6773'. Current PBTD is 6732'. On October 3, 1975 the 5-1/2" casing was perforated w/4 1/2" JHPF in the Drinkard interval 6520-6707'. The drinkard was then treated with 3000 gal 15% NE HCL inhibited HCL and frac treated with 60,000 gal 9.2#/gal gelled brine and 1 - 2# 20-40 SPG. Well was equipped to pump on October 15, 1975 and potentialied for 52 BOPD and 90 BWPD. The Drinkard was again stimulated on February 4, 1977 with 1000 gal 15% NE HCL inhibited HCL.
 - (4) Decline Curves: Drinkard Oil (Attached)
 - (5) Bottom Hole Pressure Data:

Blinebry: Datum -2400	Pressure @ Datum 675 psi*
Drinkard: Datum -2975	Pressure @ Datum 850 psi*
- *Estimates based on most recent available BHP data within vicinity of well and fluid level test.
- (6) Fluid Characteristics: Blinebry and Drinkard are presently being commingled downhole in Gulf's H. T. Mattern (NCT-C) Wells No. 5 and 8, Order No. R-5274, dated August 31, 1976. There has been no evidence of fluid incompatibility.
 - (7) Value of Commingled Fluids: Blinebry and Drinkard production are presently being surface commingled on this lease per Administrative Order PC-517, dated September 8, 1975. Since production is already being commingled on the surface, downhole commingling will not affect the price.
 - (8) Current Production Tests: See attached C-116.
 - (9) All offset Operators have been notified by a copy of this application.

Continental Oil Company, P. O. Box 460, Hobbs, NM 88240
Campbell & Hendrick, P.O. Box 401, Midland, TX 79701
Texaco Inc. P. O. Box 728, Hobbs, NM 88240
Sohio Petroleum Company, P. O. Box 3000, Midland, TX 79701
Getty Oil Company, P. O. Box 249, Hobbs, NM 88240
Apco Oil Company, P.O. Box 1027, Odessa, TX 79760
Sun Oil Company, P. O. Box 1205, Hobbs, NM 88240
Amerada Hess Corporation, P.O. Box 840, Seminole, TX 79360
Marathon Oil Company, P. O. Box 2409, Hobbs, NM 88240
Petro-Lewis Corporation, P. O. Box 509, Levelland, TX 79336
Shell Oil Company, P. O. Box 1509, Midland, TX 79702
Texas Pacific Oil Company, P.O. Box 4067, Midland, TX 79701

Lease # Well no: H.T. Mattern (NCT-C) # 7
 Pool: Drinkard



**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Gulf Oil Corporation		Pool Drinkard		County Lea										
Address P. O. Box 670, Hobbs, NM 88240				Type of Test - (X) <input checked="" type="checkbox"/> TEST - (X)										
				Scheduled <input type="checkbox"/> Special <input checked="" type="checkbox"/>										
LEASE NAME H. T. Mattern (NCT-C)	WELL NO. 7	LOCATION			DATE OF TEST 7-10-78	CHOKE SIZE 2 1/2" w/o	TBG. PRESS. 25	DAILY ALLOW-ABLE 10	LENGTH OF TEST HOURS 24	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL 5200
		U J	S 18	T 21						R 37	WATER BLS.	GRAV. OIL BLS.	OIL BLS.	

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowable when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Well original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

[Signature]
(Signature)
Well Tester

July 26, 1978 (Date)

Lease H. T. Mattern (NCT-C) Well No. 7 Pool Drinkard
unit 5
Location 2130 FSL 1980 FEL Sec 18-21S-37E County Lea State NM

GLE: 3502

KDB: 3514.2
H = 12.2

Initial Comp. Date: 10-20-75
Producing Formation: Drk

Zone	Comp. Date	Date Abandon
<u>6520-6707</u>	<u>10-20-75</u>	

8 5/8" OD 24 # Grade K-55

Set @ 1295' w/ 500 sxs

Top of Cmt @ by:
Cmt. circulated

Treatment History: (Current Zone)
(10-3-75) Spot 200 gal 15% HCL across
perfs 6520-6707. Straddle each set
Drk perfs w/ 400 gal 15% HCL (Total acid 3,000)
Frac w/ 60,000 gal 9.2 # gel brine +
1-2 # 20-40 SPC in frac (Pot 52 BO, 90 BW
(2-4-77) Dump 1,000 gal acid-Drk
Before 9 BO, 20 BW After 10 BO, 17 BW

2 3/8" 4.70 # EUE BRD J-55 +bg

5556-58 Proposed
5594-96 Blinbry
5648-50 perforations
5683-85
5733-35
5770-72
5848-50

Baker Mod. 'B' Tbg. Anchor
Set @ 6453 w/ 9,000 # -T
SN @ 6578'
4' perf sub @ 6579'
13 + 27' 8 BPB
BTM Tbg 6613'

6520-22
6554-56
6586-88
6656-58
6673-75
6691-93
6705-07

DRK.
4-1/2" JHPF

5 1/2" OD 15.50 # Grade K-55

Set @ 6773' w/ 650 sxs

Top of Cmt @ 2350 by TS
Cmt w/ 300 sxs CH C + 16%
Gel + 2% NaCl + 2% CFR2
Tailed in w/ 350 sxs CH H +
.5% CFR-2

Producing History:

Formation:

Month or Year	Oil	Wtr	Gas

Last Test Dated: 2-10-78

7 BOED 17 BWPD 19 I

FL: Calc. Ppg. Eff:

Cum. Oil 12,587 BBL Cum. Gas 13288 LM

Remarks and Recommendation:

Prepared By: LB Quamhoe

Date: 7-16-78

OIL CONSERVATION COMMISSION
Hobbs DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE July 27, 1978

RE: Proposed MC _____
Proposed DHC X _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

JUL 31 1978
Santa Fe

Gentlemen:

I have examined the application dated _____
for the Gulf Oil Corp. H. T. Mattern (NCT-C) #7-J 18-21-37, #9-P 7-21-37, #11-M
Operator Lease and Well No. Unit, S-T-R 8-21-37

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

Jerry L. [Signature]